Ficopomatus enigmaticus

Australian reef-building tube worm

Threat scores

1. Ecological impact
    - In Argentina's Mar Chiquita Coastal Lagoon, large masses form round reefs up to 7 m in diameter and 0.5 m deep, scattered over hundreds of hectares
    - In several places in Europe it has colonized waters heated by power plant discharges
    - In the Netherlands, masses have clogged and interfered with the operation of locks (Vaas 1978), and in New Zealand it has been a nuisance fouler of power plant intake pipes and recreational boat hulls (Forrest et al. 1997)
    - Also suggested that large populations of may remove suspended particulate matter, reduce excess nutrient loads and improve oxygen levels in boat basins or enclosed waters with poor water quality (Eno et al. 1997)
    - Presence of large numbers in enclosed waters including marinas, where they would be considered a fouling nuisance, has had very beneficial effects on water quality, reducing suspended particulate loads and improving both the oxygen and nutrient status
    - A large population of F. enigmaticus can remove material from suspension and thus have a very beneficial effect on other benthic species within enclosed or semi-enclosed waters
    - Abundant filter-feeders can also deplete phytoplanktonic resources and suspended particulate organic material which might otherwise be utilised by other, native, filter-feeders
    - Through production of faeces and psuedofaeces in large quanities they also concentrate contaminants from the water column and pass them into the sediment and hence up the food chain
2. Invasive potential
    - Its disjunct distribution suggests spread by remote dispersal of mobile adults
3. Geographic extent
    - Locally patchy
4. Management difficulty
    - No known eradications from marine environment
    - Removed from buoys and ships' hulls by scraping

Geography and Habitat

1. Native: Cool to warm temperate regions of the Indian Ocean, possibly including southern or western Australia
2. Introduced: Virginia, Carolinas, Hawai'i

- Habitats
    - Marine, estuaries/bays, intertidal zones, brackish water
    - Survives in marine habitates, but reproduces only at lower salinities
    - Low intertidal to shallow subtidal on rocks, concrete, wood, shells and other hard surfaces, including pilings and the sides of floating docks, buoys and boat hulls

Invasion Pathways

1. Hull/Surface fouling

2. Stocking in open water - oyster farming
3. Ballast water and sediments

Non-Native Locations

1. 41- Virginian
2. 58- Northern California
3. 152- Hawaiian Islands

Sources

1. Molnar, Jennifer, et al. 2008. "Assessing the global threat of invasive species to marine biodiversity." *Frontiers in Ecology and the Environment.* 6 (9), pp. 485-492.
2. http://conserveonline.org/workspaces/global.invasive.assessment
3. http://www.solpugid.com/cabiota/ficopomatus_enigmaticus_5.jpg